



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/604,503	06/27/2000	John E. Montague	23689-211	4489

21186 7590 08/26/2004

SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A.
P.O. BOX 2938
MINNEAPOLIS, MN 55402

EXAMINER

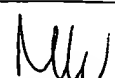
SHAFFER, ERIC T

ART UNIT	PAPER NUMBER
----------	--------------

3623

DATE MAILED: 08/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/604,503	Applicant(s) MONTAGUE, JOHN E.	
	Examiner Eric T. Shaffer	Art Unit 3623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 1 - 20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
 If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
 * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
 a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Applicant's arguments, filed April 26, 2004, concerning claims 1 - 20 in the Office Action mailed February 4, 2004, have been considered and deemed unpersuasive.

None of the old claims have been cancelled by the applicant and the applicant has not added any new claims. Claims 1, 8 and 15 have been amended. Claims 1 – 20 are pending and are prosecuted in the response set out below.

Rejections - 35 USC § 112

2. Claims 1 – 20 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claims contains subject matter, which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention, without undue experimentation. The applicant does not provide enough detailed information to specifically describe what constitutes an environmental change, or a current event, and how such a change can be determined to be outside the scope of a campaign. Said terms are not defined specifically enough so that one of ordinary skill in the art could construct such a device from the applicant's disclosed specification and claim language.

Claim Rejections - 35 USC § 101

3. Claims 1 – 20 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The basis of this rejection is set forth in a two-prong test of:

- (1) whether the invention is within the technological arts; and
- (2) whether the invention produces a useful, concrete, and tangible result.

For a claimed invention to be statutory, the claimed invention must be within the technological arts. Mere ideas in the abstract (i.e. abstract idea, law of nature, natural phenomena) that do not apply, involve, use, or advance the technological arts fail to promote the "progress of science and the useful arts" (i.e., the physical sciences as opposed to social sciences, for example) and therefore are found to be non-statutory subject matter. For a process claim to pass muster, the recited process must somehow apply, invoke, use, or advance the technological arts.

In the present case, the method of optimizing a campaign does not specifically use technology to carry out any of the non-trivial claimed method steps. For example, the steps of claim 1 of a set of executable instructions residing in a computer readable medium, of claim 8 step for optimizing a campaign, and claim 15 to optimize a contact list, may be performed manually or without the aid of any technology. Thus, claims 1 – 20 do not affect, effect, or are affected by technology, and thus do not recite statutory subject matter within the body of the claims. Use of a computer, a computer operable medium, or some other technology device within the body of the claims is required for said claims to be patentable.

Claims 1 – 20, also do meet the second part of the two-prong test because the claimed invention does not produce a useful, concrete and tangible result. The claims recite non-functional descriptive material and do not recite any criteria by which an analytical step is

Art Unit: 3623

performed and do not teach a useful outcome or output produced by the functioning of the invention. In order to meet the standards of the two-pronged test, the applicant's invention must both incorporate technology and produce a tangible result.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1 - 20 are rejected under 35 U.S.C. 103(a) as being anticipated by Thearling (US 6,240,411) in view of the SAS software product featured on the website www.sas.com.

As per claim 1, Thearling discloses a method of optimizing a campaign using a set of executable instructions, the set of executable instructions residing in a computer readable medium and when performing the method comprising:

receiving a campaign operable to determine a success factor and a failure factor, (column 9, lines 49 - 52, "if a model generates scores in a range from zero to one, the creator of the model might indicate that scores above 0.8 indicate a high likelihood that a customer will provide repeat business"), wherein above 0.8 is a success factor and below is a failure factor.

receiving a contact-list including a plurality of contacts (column 4, lines 60 - 62, "As described with reference to FIG. 4A, a part of the campaign management process is selecting subsets or contact for further processing"), each contact associated with one or more

Art Unit: 3623

demographic attributes, (column 5, lines 12 – 15, “a simple form of query examining two fields within a table-age to be greater than 25 and income to be greater than thirty thousand dollars per year”), wherein age and income are demographic attributes.

associating a completed contact list with each completed contact in the contact list and a remaining contact list with each non completed contact in the contact list, (column 1, lines 39 – 41, “a database where the records correspond to individuals, the individual's age, address, and income”), wherein individuals are contacts.

associating at least one of the success factor (column 12, lines 60 – 61, “records that only have a model score of greater than 0.7”) and the failure factor (column 12, lines 61 – 62, “once the query has been evaluated, these tables may be deleted”) with each completed contact in the completed contact list, (column 3, lines 54 - 65, “A query is an inquiry, in any form, that can be used to classify or sort records. The queries step 44 may involve different ways of defining subsets of records in an input database. Thus, in FIG. 4B, a query might take all records for persons with an income over thirty thousand dollars. A second query might select records of the database that have an income of over twenty five thousand dollars and an age of over 45. In this particular example, a person who is over 45 and has an income of over thirty thousand dollars would satisfy both the first query and the second query”), wherein a success is a model score greater than 0.7, a failure is to have a table deleted, and a query specifying specific attributes produces a contact list.

retrieving each contact in the remaining contact list based on the determined correlation, (column 6, lines 23 – 24, “The reference is used to execute the model to score at least one of the plurality of records, and a selected set of records is selected from the database, each record of the

Art Unit: 3623

selected set satisfying the query”), wherein the persons represented in the selected records are contacts.

determining at configurable contact intervals from the completed contact list if a correlation exists (column 9, lines 49 – 52, “if a model generates scores in a range from zero to one, the creator of the model might indicate that scores above 0.8 indicate a high likelihood that a customer will provide repeat business”), between the completed contacts associated with the factors and one or more demographic attributes (column 1, lines 54 – 55, “the characteristics recorded in the database, corresponding to the columns name, age, and income”), wherein the contact intervals represent elapsed periods of time (column 8, line 13, “dynamically resolving model values during the campaign”), wherein the environmental changes effect the correlation during the elapsed periods of time and the environmental changes are related to current events occurring during the campaign, (column 8, lines 47 - 60, “the campaign management process is performed, with models being scored during the campaign management process. Thus, rather than resolving the model scores for all of the entries in a database prior to beginning the campaign management process, the model values can be determined during campaign management. In one embodiment, the campaign management process illustrated in FIG. 4A may be used. In this case, the scoring of models can be performed as a part of one of the steps in FIG. 4A, e.g., as a part of beginning the campaign management process at step 40, before or after the de duplication step 42, or during the query at step 44, as described with reference to an embodiment below”), wherein the campaign is an elapsed period of time.

Threarling however does not teach data gathered from environments outside the scope of the campaign.

The SAS software teaches incorporating contact intervals of elapsed time periods in the data analysis (“you can use SAS/ETS software to convert time series from one sampling frequency to another. You can interpolate data from a lower frequency to a higher frequency such as monthly to weekly or aggregate data from a higher frequency to a lower frequency such as monthly to quarterly”, page 19). SAS/ETS also teaches environmental variables outside the scope of a campaign (“SAS/ETS software makes it easy to access directly many of the most popular commercially available economic and financial time series databases. Data can be extracted from files supplied by government and commercial data vendors”, page 19). The SAS/ETS system also performs Econometric Modeling (page 20) using the outside economic data to perform time series modeling (page 26) and regression analysis (page 20) that uses the length of time interval as a best-fit variable, wherein the best fit model determines the time period over which the data produces the strongest correlation coefficients, and chooses this as the optimal time period. Both inventions are analogous art because they both analyze business customer data in order to forecast future customer data and because the Threaling invention makes reference to the SAS invention.

It would have been obvious for one of ordinary skill in the art at the time the invention was made to combine the Threaring invention with the SAS software because the Threaring patent specifically incorporates SAS software (“the preparation of the model can be performed by the SAS Enterprise Miner or other SAS statistical model tools such as SAS/STAT”, column 8, lines 16 - 18) and points to the SAS software as an example of a ideal platform for the Threaling invention (“e.g. the SAS program described above”). Furthermore the SAS system contains an extensive body of outside economic information and analysis capabilities to make

Art Unit: 3623

the information useful in performing correlation and time series analysis while providing the simulation and forecasting functionality necessary to incorporate the environmental changes during the elapsed time periods. It would be obvious to incorporate the environmental changes because as economic factors and indicators like interest rates change, the economic environment changes and such a system would be more able to react and adapt to these changes, making the system more efficient and more accurate.

Claim 2 is the method of claim 1, further comprising removing one or more selective contacts in the remaining contact list based on an unfavorable value of the correlation which is associated with one or more of the selective contacts, (column 4, lines 60 – 62, “a part of the campaign management process is selecting subsets or “contacts” for further processing”) where the contact list is selected or built, and (column 11, lines 58 – 64, “a result table could be built by removing those records satisfying the income test from a restricted table used for model evaluation. In this case, when the restricted table is built, the OR query could first be formulated at a temporary table storing the results of the first portion of the query”), where the contact on the list that do not meet a specific criteria or are unfavorable are then removed.

As per claim 3, Thearling discloses the method of claim 1, further comprising: initiating at one or more intervals the step for determining the correlation, (column 3, lines 57 – 65, “The queries step 44 may involve different ways of defining subsets of records in an input database. Thus, in FIG. 4B, a query 1 44a might take all records for persons with an income over thirty thousand dollars. A second query 44b might select records of the database that have an income of over twenty five thousand dollars and an age of over 45. In this particular example, a person

Art Unit: 3623

who is over 45 and has an income of over thirty thousand dollars would satisfy both the first query and the second query”).

As per claim 4, Thearling discloses the method of claim 3, further comprising: adjusting one or more of the intervals if no substantial correlation is determined. Additional intervals can be added or adjusted by executing an “OR” within a query, (column 8, lines 38 – 42, “a Boolean and/or decision tree can be built for a query with leaves of the tree including not only field comparisons with other fields or values, but also a comparison of model scores with other fields, model scores or values”).

As per claim 5, Thearling discloses the method of claim 1, further comprising: randomly seeding the retrieved remaining contact list with an adjustable percentage of non-completed contacts without regard for the determined correlation, (column 3, lines 17 –21, “In the split step, the records that satisfy any applicable preceding query or queries may be divided. The division may, for example, be a random division based on percentage. Thus, at step 46a of FIG. 4B, a random 95% to 5% split is performed”).

As per claim 6, Thearling discloses the method in claim 5 further comprising: re-determining the correlation to discover if as a result of randomly seeding a modified correlation is detected, (column 3, lines 17 –21, “In the split step, the records that satisfy any applicable preceding query or queries may be divided. The division may, for example, be a random division based on percentage. Thus, at step 46a of FIG. 4B, a random 95% to 5% split is performed”).

retrieving each remaining contact in the remaining contact list based on the modified correlation, (column 3, lines 21 – 23, “At step 46b, no split is effectively performed--all of the records satisfying the second query at 44b are passed along through the step illustrated at 46b”).

As per claim 7, Thearling discloses the method of claim 1, further comprising:
discarding remaining contacts in the remaining contact list having unfavorable demographics with respect to the determined correlation; (column 15, lines 56 – 58, “At a step 47b, an alternative action might be to take no action at all--and any record falling into this class would be assigned a value corresponding to taking no action”).

acquiring one or more new contacts not originally associated with the contact list, each new contact having favorable demographics with respect to the determined correlation and each new contact sorted into the remaining contact list (column 15, lines 56 – 58, “in a system including ranking based on model scores, the selection criteria, or query, processor may similarly invoke the data mining engine to process the model reference”).

As per claim 8, Thearling teaches is a system for optimizing campaigns, comprising:
a campaign optimizer comprising executable instructions operable to communicate with one or more contact data stores, the data stores associated with at least one of one or more completed contacts and one or more non completed contacts, the campaign optimizer operable to receive completed contacts at adjustable time intervals, (column 12, lines 35 – 38, “First, the known or determinable portions of the query are evaluated. Accordingly, a table is built that includes only those records that meet the age greater than 30 and state=cal portion of the query. This table may include either the entire record, or only a "tag," i.e., an identifier for the corresponding record e.g., in a database including customers, social security number or the

Art Unit: 3623

unique name of the customer could be used as a "tag"; when processing is complete, the other fields of the record necessary for further action could be determined from a larger table using the table with the tag id's for identifying the records that include the larger set of fields"), wherein the records are data on people who are contacts;

a non-completed contact sorter (column 3, lines 55 – 57, "a query is an inquiry, in any form, that can be used to classify or sort records") comprising executable instructions operable to communicate with the correlator, one or more of the data stores, and the campaign optimizer, the non completed contacts sorter operable to sort non completed contacts in one or more of the data stores based on the correlation, (column 15, lines 46 – 48, "further process the models scores to produce a temporary table that includes only records satisfying the query element involving the model"), wherein query element is synonymous with executable instructions and records are the names and information of people who are contacts;

a correlator comprising executable instructions operable to communicate with the campaign optimizer, to receive the completed contacts, and to determine if a correlation associated with the completed contacts exist between the completed contacts identified with at least one of a success factor and a failure factor and one or more demographic attributes; (column 6, lines 17 – 21, "the present invention, a method of classifying a plurality of records in a database is disclosed. According to this embodiment, a model for ascertaining a characteristic of records in a database is provided. A selected criteria, such as a query or ranking, is formed including a reference to the model"). In this embodiment, characteristics of records is synonymous with demographic attributes and ranking is synonymous with correlation, where higher rank is higher correlation, the environment changes related to current events occurring

Art Unit: 3623

during the contact campaign, (column 8, lines 47 - 60, “the campaign management process is performed, with models being scored during the campaign management process. Thus, rather than resolving the model scores for all of the entries in a database prior to beginning the campaign management process, the model values can be determined during campaign management. In one embodiment, the campaign management process illustrated in FIG. 4A may be used. In this case, the scoring of models can be performed as a part of one of the steps in FIG. 4A, e.g., as a part of beginning the campaign management process at step 40, before or after the de duplication step 42, or during the query at step 44, as described with reference to an embodiment below”), wherein the campaign is an elapsed period of time.

Thearling does not specifically give mention to the correlation due to environmental changes outside the scope of the campaign during time intervals.

The SAS software contains a Time Series Forecasting System that uses adjustable time intervals (“use the automatic model selection facility to select the best-fitting model for each time series”, page 19). Furthermore SAS/ETS also contains data on environmental variable outside the scope of a campaign (“SAS/ETS software makes it easy to access directly many of the most popular commercially available economic and financial time series databases. Data can be extracted from files supplied by government and commercial data vendors”, page 19). The SAS/ETS system also performs Econometric and Systems Modeling using the outside economic data to perform time series modeling and regression analysis that uses time and length of time interval as a best-fit variable. The SAS software also performs simulation and forecasting (page 22).

It would have been obvious for one of ordinary skill in the art at the time the invention was made to combine the Threarling invention with the SAS software because the Threarling patent specifically incorporates SAS software (“the preparation of the model can be performed by the SAS Enterprise Miner or other SAS statistical model tools such as SAS/STAT”, column 8, lines 16 - 18) and points to the SAS software as an example of a ideal platform for the Threarling invention (“e.g. the SAS program described above”). Furthermore the SAS system contains an extensive body of outside economic information and analysis capabilities to make the information useful in performing correlation and time series analysis while providing the simulation and forecasting functionality necessary to incorporate the environmental changes during the elapsed time periods. It would be obvious to incorporate the environmental changes because as economic factors and indicators like interest rates change, the economic environment changes and such a system would be more able to react and adapt to these changes, making the system more efficient and more accurate.

As per claim 9, Threarling teaches the system of claim 8, wherein the correlator is operable to determine a correlation coefficient for each of the demographic attributes, (column 12, lines 59 – 63, “a table can be built including records that only have a model score of greater than 0.7”),).

As per claim 10, Threarling teaches the system of claim 8, wherein the contacts are associated with an outbound contact campaign (column 15, lines 4 – 6, “In this embodiment, the data warehouse 125 stores the database tables, e.g., all of the tables storing customer information for a marketing campaign”).

Art Unit: 3623

As per claim 11, Thearling teaches the system of claim 8, further comprising: an outcome analyzer comprising:

executable instructions operable to determine upon completion of one or more of the completed contacts if the completed contact is associated with at least one of the success factor and the failure factor, (column 14, lines 60 – 67, “The campaign manager may include (in addition to other components for performing the campaign management functions described above not shown, a query processor. In this embodiment, the query processor is responsible for controlling evaluation of a query, e.g., parsing a Boolean tree as generally described above. When being used, a query with model reference or references may be input into the query processor”), where a parsing query processor is synonymous with executable instructions and references are synonymous with contacts.

As per claim 12, Thearling teaches the system of claim 8, further comprising an optimization manager comprising executable instructions operable to randomly seed the non-completed contacts in one or more of the data stores with a percentage of non-completed contacts without regard to the correlation, (column 3, lines 17 –21, “In the split step, the records that satisfy any applicable preceding query or queries may be divided. The division may, for example, be a random division based on percentage. Thus, at step 46a of FIG. 4B, a random 95% to 5% split is performed”).

As per claim 13, Thearling teaches the system of claim 12, wherein the optimization manager is operable to communicate with the correlator to re-determine a modified correlation based on completed contacts associated with the randomly seeded contacts, (column 4, lines 60 –

Art Unit: 3623

62, “a part of the campaign management process is selecting subsets (or “contacts”) for further processing”).

As per claim 14, Thearling teaches the system of claim 13, wherein the optimization manager is operable to communicate to the non completed contacts sorter the modified correlation resulting a resort of the non completed contacts in one or more of the data stores based on the modified correlation (column 6, lines 18 – 25, “According to this embodiment, a model for ascertaining a characteristic of records in a database is provided. A selected criteria, such as a query or ranking, is formed including a reference to the model. The reference is used to execute the model to score at least one of the plurality of records, and a selected set of records is selected from the database, each record of the selected set satisfying the query”).

As per claim 15, Thearling teaches a method of optimizing a contact list during a campaign using a set of executable instructions, comprising:

identifying a contact campaign, (column 3, lines 11 – 13, “The purpose of campaign management is to select and categorize the records of the database, e.g., a corresponding row, such as 31b, 31c, 31d or 31e, for a variety of actions or create a “segment” or segments of the database for action”), wherein the records created as a segment identify the contacts for a campaign;

receiving a contact list including completed contacts and non completed contacts, each of the contacts associated with a success factor, a failure factor, and one or more demographic attributes (column 3, lines 53 – 65, “a step 42, a de-duplication or “dedupe” may be performed. This step may be best understood with the following step, 44, where queries are performed. A query is an inquiry, in any form, that can be used to classify or sort records. The queries step 44

Art Unit: 3623

may involve different ways of defining subsets of records in an input database. Thus, in FIG. 4B, a query 1 44a might take all records for persons with an income over thirty thousand dollars. A second query 44b might select records of the database that have an income of over twenty five thousand dollars and an age of over 45. In this particular example, a person who is over 45 and has an income of over thirty thousand dollars would satisfy both the first query and the second query”), wherein the persons in the records are contacts;

reordering during the contact campaign the non completed contacts based on the correlation (column 6, lines 18 – 21, “a model for ascertaining a characteristic of records in a database is provided. A selected criteria, such as a query or ranking, is formed including a reference to the model”), wherein a ranking is a reordering;

determining during the contact campaign at adjustable intervals a correlation between the factors and one or more of the demographic attributes of the completed contacts (column 3, lines 53 – 65, “Thus, if a model generates scores in a range from zero to one, the creator of the model might indicate that scores above 0.8 indicate a high likelihood that a customer will provide repeat business), the environment changes related to current events occurring during the campaign, (column 8, lines 47 - 60, “the campaign management process is performed, with models being scored during the campaign management process. Thus, rather than resolving the model scores for all of the entries in a database prior to beginning the campaign management process, the model values can be determined during campaign management. In one embodiment, the campaign management process illustrated in FIG. 4A may be used. In this case, the scoring of models can be performed as a part of one of the steps in FIG. 4A, e.g., as a part of beginning the campaign management process at step 40, before or after the de duplication step 42, or during the

Art Unit: 3623

query at step 44, as described with reference to an embodiment below”), wherein the campaign is an elapsed period of time and thus an adjustable interval.

Thearling does not specifically give mention to the correlation due to environmental changes occurring outside the scope of a campaign during time intervals.

The SAS software contains a Time Series Forecasting System that uses adjustable time intervals (“use the automatic model selection facility to select the best-fitting model for each time series”, page 19). Furthermore SAS/ETS also contains data on environmental variable outside the scope of a campaign (“SAS/ETS software makes it easy to access directly many of the most popular commercially available economic and financial time series databases. Data can be extracted from files supplied by government and commercial data vendors”, page 19). The SAS/ETS system also performs Econometric and Systems Modeling using the outside economic data to perform time series modeling and regression analysis that uses time and length of time interval as a best-fit variable. The SAS software also performs simulation and forecasting (page 22). Both inventions are analogous art because they both analyze business customer data in order to forecast future customer data and because the Thearling invention makes reference to the SAS invention.

It would have been obvious for one of ordinary skill in the art at the time the invention was made to combine the Thearling invention with the SAS software because the Thearling patent specifically incorporates SAS software (“the preparation of the model can be performed by the SAS Enterprise Miner or other SAS statistical model tools such as SAS/STAT”, column 8, lines 16 - 18) and points to the SAS software as an example of a ideal platform for the Thearling invention (“e.g. the SAS program described above”). Furthermore the SAS system

Art Unit: 3623

contains an extensive body of outside economic information and analysis capabilities to make the information useful in performing correlation and time series analysis while providing the simulation and forecasting functionality necessary to incorporate the environmental changes during the elapsed time periods. It would be obvious to incorporate the environmental changes because as economic factors and indicators like interest rates change, the economic environment changes and such a system would be more able to react and adapt to these changes, making the system more efficient and more accurate.

As per claim 16, Thearling teaches the method of claim 15 further comprising seeding in random order an adjustable percentage of the non completed contacts without regard for the correlation, (column 3, lines 17 -21 “In the split step, the records that satisfy any applicable preceding query or queries may be divided. The division may, for example, be a random division based on percentage. Thus, at step 46a of FIG. 4B, a random 95% to 5% split is performed”).

As per claim 17, Thearling teaches the method of claim 16, further comprising:
determining a new correlation by evaluating the factors and one or more of the demographic attributes for completed contacts after the seeding step; (column 3, lines 7 – 9, “One or more of the fields may correspond to a characteristic computed according to one of the above models generated through data mining or other technique, e.g. column 32d having a score”).

reordering the non completed contacts based on the new correlation. This is anticipated by Thearling, which discloses, (column 3, lines 11 –13, “the purpose of campaign management is to select and categorize the records of the database”).

Art Unit: 3623

As per claim 18, Thearling teaches the method of claim 15, further comprising receiving a reference operable to modify and retrieve one or more contact data records from one or more data stores associated with each of the contacts, (column 5, lines 39 – 43, “Additions or alterations to the current query being edited can be done with a separate pop-up tool bar 54a-54h. Thus, a cursor marker (not shown) present in the current query 55 could indicate where additional query language commands could be inserted”) and features an example of the screen from which said queries can be executed in Figure 5.

As per claim 19, Thearling teaches the method of claim 15, further comprising reporting summary data associated with the contact campaign; (column 4, lines 40 – 47, “first extract for 48a may be formed in the example of FIG. 4B for providing a file to a mail order house that would arrange for mailing of appropriate coupons. In this case, an output data file could be formed that includes the name, an address field, and the particular value proposition i.e. mailing a five dollar or ten dollar coupon”).

As per claim 20, Thearling teaches the method of claim 15, wherein the contact campaign is conducted over at least one of an e-mail channel, an on-line chat channel, a voice channel, a video channel, an audio channel, a kiosk channel, an ATM channel, and a wireless channel, (column 3, lines 20 - 22, “Action 1 36a may correspond to sending a person a coupon through the mail. Action 2 36b may correspond to making a telephone call to the individual”).

Response to Amendments

6. Applicant's arguments filed April 26, 2004, have been fully considered, but the same are not persuasive.

a) Applicant argues that the examiner has read the terms environmental and scope overly broadly so as to include economic data from external sources. However, the applicant does not within the claim language or in the specifications, teach a set of criteria by which the scope of the term environmental can be determined. A set of criteria or examples of things that are not within the scope are needed in order to more clearly define what the applicant is claiming with respect to events occurring outside the scope of the campaign.

b) Applicant argues that he has now provided more detail as to what is meant by the phrase 'environmental changes' by claiming said changes are related to the applicant's term 'current events'. However, the phrase 'current events' is also very broad and vague in its meaning so as to include a large variety of events, is not defined in the specification, and therefore does not significantly add to the definition of 'environmental changes'.

c) Applicant argues that the economic data taught by the SAS invention are within the scope of the campaign as taught by the Thearling invention. However, the applicant has failed to define precisely the terms and criteria by which something is within or not within the scope of the campaign and why economic data that is clearly outside the scope of a campaign should now be considered inside the campaign. By not providing specific criteria as to what factors determine what is outside and within the scope of a campaign, it can not be said with any degree of certainty or authority what type of information, such as economic data, is within the scope of the campaign.

d) Applicant argues that the examiner believes that scope relates to where the data is acquired. However, the examiner argues that the applicant has not specifically detailed the definition of scope for the purpose of the invention. The applicant has argued that the invention

Art Unit: 3623

includes things outside the scope of the campaign, and then when presented with the examiner's example of economic data, which is clearly outside the scope of a campaign, applicant argues that economic data is within the scope of a campaign. The applicant needs to more fully define what specific things are being claimed as within or not within the scope of the invention in order for this recited feature to be given patentable weight.

In light of the above stated facts, examiner respectfully states that applicant's arguments have been fully considered, deemed unpersuasive and the rejections under the prior Office Action, mailed on February 4, 2004 are maintained.

Art Unit: 3623

Conclusion

7. No claims were allowed and all claims were rejected.

8. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Eric Shaffer whose telephone number is (703) 305-5283. The Examiner can normally be reached on Monday-Friday, 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq Hafiz can be reached on (703) 305-9643.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Receptionist whose telephone number is (703) 305-3900.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington D.C. 20231

Or faxed to:

(703) 746-7238 [After Final communications, labeled "Box AF"]

(703) 746-7239 [Official communications]

(703) 706-9124 [Informal/Draft communications, labeled
"PROPOSED" or "DRAFT"]

Hand delivered responses should be brought to Crystal Park 2, 2451 Crystal Drive, Arlington, VA, 7th floor receptionist.

ETS

August 19, 2004



SUSANNA M. DIAZ
PRIMARY EXAMINER

AU-3623